

GTP/US 3183

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applic. No. : 09/917,541 Confirmation No. 9996
Applicant : Katrin Reisinger
Filed : July 27, 2001
Title : Mailing Machine and Initialization Method
Group Art Unit : 3621
Examiner : Pierre E. Elisca

Docket No. : GTP/US 3183
Customer No. : 24131

FURTHER REPLY BRIEF AND RENEWAL OF REQUEST FOR ORAL HEARING

Mail Stop Appeal Brief - Patents

Hon. Commissioner for Patents
P.O. Box 1450
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S i r :

This is a *Reply Brief* responding to the *Examiner's Answer* mailed March 24, 2009. Additionally, Appellant notes that a Request for Oral Hearing was made on March 13, 2006, in connection with present Appeal, and the oral hearing fee was previously paid. **Appellant, hereby, renews and reiterates that Request for Oral Hearing.**

Arguments:

Please consider the present Reply Brief in combination with the Appeal Briefs and other Reply Briefs filed by Appellant in connection with present Appeal. Appellant comments as follows with respect to the Examiner's Answer dated March 24, 2009 (the "**Examiner's Answer**"):

In item (7) of the **Examiner's Answer**, entitled **Claims Appendix**, the Examiner states that the brief includes a statement that claims 4, 24 and 26 do not stand or fall together and provides reasons. Appellant respectfully notes that Appellant provided reasons for the patentability of claims **1**, **18**, **4**, **24** and **26**, and not merely claims 4, 24 and 26. Appellant respectfully requests that **all** of the individually argued claims be considered in the present Appeal.

Further, item (10) of pages 5 - 6 of the **Examiner's Answer**, stated, in part:

Leon discloses the system components as per the prior Office Action except for the removable authorization device. However, Leon does disclose as per col. 37, lines 48 - 50, that the Secure Meter Device (SMD) can further include an input interface circuit that couples to an input element. The input element can be a switch, a push button, a key, or the like. The Examiner submits that teaching of the use of an external input element provides the motivation/bridge to incorporate the use of a dongle and/or cryptographic key stored on a token as taught by the

second reference Vu in the prior 103 Office Action.
[emphasis added by Appellant]

Appellant respectfully disagrees with the above statements
from the **Examiner's Answer**.

First, among other things, Appellant respectfully disagrees
with the statement alleging that "Leon discloses the system
components as per the prior Office Action except for the
removable authorization device". Among other limitations of
Appellant's claims, Leon does not disclose a security module
or a removable authorization device. A security module (as
recited in Appellant's claims) and a **secure metering device or
SMD** (as disclosed in Leon) are not comparable. Rather,
Appellant's claimed **security module** "serves for checking the
authorization and can prevent initialization without
authorization." See, the Abstract of the instant application,
the fourth full sentence. Appellant's claims similarly define
the claimed security module. For example, Appellant's claim 1
recites, among other limitations:

**said security module being programmed to check whether
authorization is present and for preventing an
initialization of said mailing machine without
authorization.** [emphasis added by Appellant]

Similarly, Appellant's independent claim 18 recites, among
other limitations:

authorizing an initialization with an authorization device **and checking authorization with a security module, in order to prevent initialization without authorization;** [emphasis added by Appellant]

However, contrary to Appellant's claimed **security module**, an **SMD**, as disclosed in Leon, **is already initialized by a Crypto-Officer, prior to checking the authorizations.** This can be seen from col. 8 of Leon, line 63 - col. 9, line 19, which states:

A Crypto-Officer initializes the SMD at the factory (i.e., after the metering device has been manufactured). The Crypto-Officer role is available at the factory, before the SMD is sealed in its tamper-evident enclosure. The SMD validates the Crypto-Officer when the Crypto-Officer installs a FIT (field initialization transaction) flag that is located on the SMD. The SMD performs the Initialization service after the flag has been installed. The Initialization service causes the SMD to generate a pair of public and private keys, export the public key, and load a Provider X.509 certificate that includes the provider's public key. The Crypto-Officer obtains and provides the Provider X.509 certificate to the SMD and archives the SMD's public key. **After initializing the SMD, the Crypto-Officer removes the flag and closes the tamper-evident cover.**

The SMD supports the provider role by providing the following services: Registration, Funding, Audit, and Withdrawal. These services are described in detail below. **Whenever one of these services is requested, the SMD validates that the requester is an authorized provider.** This is achieved by using the provider's public key to validate the signature on the service request that has been signed using the provider's private key. The provider's public key is retrieved from the Provider X.509 certificate that is loaded by the Crypto-Officer during initialization. [emphasis added by Appellant]

As can be seen from the foregoing, **in Leon, initialization is completed prior to checking any authorizations**. As such, among other limitations of Appellant's claims, Leon fails to teach or suggest Appellant's particularly claimed **security module which checks authorization, in order to prevent initialization without authorization**. The Vu reference does not cure the above-described deficiency in the teachings of Leon.

In addition to the remarks made above, Appellant incorporates herein by reference, and reiterates, the further remarks made in the **Supplemental Appeal Brief**, discussing how **neither of the cited references**, U. S. Patent No. 6,424,954 to Leon ("LEON") or U. S. Patent No. 6,557,104 to Vu et al ("VU"), teach or suggest, among other limitations: (1) **"a removable authorization device operationally connected to the mailing machine and configured to be interrogated by the mailing machine; and (2) the security module programmed to check whether authorization is present and for preventing an initialization of the mailing machine without authorization as recited in independent claim 1 of the instant application or the similar limitations recited in Appellant's independent method claim 18.**

As neither of the **LEON** or **VU** references teach or suggest, among other limitations of Appellant's claims, items (1) and (2) above, Appellant's claims are believed to be patentable over the **LEON** and **VU** references, taken alone, or in combination.

Further, Appellant maintains its belief that, absent impermissible hindsight reconstruction, there is no motivation in either **LEON** or **VU** to combine those references to arrive at Appellant's claimed invention. More particularly, there is no motivation in **LEON** or **VU** to add a method or apparatus for secure processing of cryptographic keys, as taught in **VU**, to the postal system of **LEON**.

Specifically addressing the portion of **LEON** cited on page 6 of the **Examiner's Answer**, col. 37, lines 48 - 50 of **LEON** do not provide motivation to provide, among other limitations of Appellant's claims, a removable authorization device, authorization from which is necessary for initialization of the mailing machine (or initialization of any other device), as required by Appellant's claims 1 and 18. **Initialization**, in the context of claims 1 and 18, is explained in the specification of the instant application. For example, page 5 of the instant application, line 8 - page 6, line 2, describes initialization as follows:

Initialization is understood as meaning a routine for the input of initialization data taking place on one occasion at the single point of entry of the destination country **before the machine is put into operation.** For this purpose, a means of authorization is brought into operative connection with the mailing machine and is designed as an easily exchangeable electronic hardware unit (dongle or chip card). The latter is connected to the mailing machine either directly or indirectly via a data source, for example a personal computer PC. The mailing machine, for example a franking machine, has an unremovable program memory **with an initialization program and a postal security module (postal security device or secure accounting device), which is designed as a means of checking the authorization of the input of initialization data.** The latter takes place, when there is authorization, directly by using the keyboard of the franking machine or indirectly via the PC or laptop or from a data center into the meter or security module. The means of authorization, i.e., the authorization device, is brought into operative connection with the meter via interfaces of the PC or the machine. [emphasis added by Appellant]

For example, page 5 of the instant application, lines 5 - 14, states:

The object of the present invention is to provide a mailing machine which overcomes the above-noted deficiencies and disadvantages of the prior art devices and methods of this general kind, **and which is provided with a ROM module with an initialization program, initialization data being introduced in a secure manner into the mailing machine via an externally accessible interface, so that unauthorized initializing is prevented.** It is further intended that a secure method will manage without exchanging the ROM module **and permit authorized initialization.** [emphasis added by Appellant]

The section of **LEON** cited in the **Examiner's Answer** as motivating a combination of **LEON** with **VU** to, allegedly, teach

Appellant's claimed invention **has absolutely nothing to do with initializing the mailing machine**, as does the removable authorization device of Appellant's claims. Rather, Col. 37 of **LEON**, lines 48 - 50, read in the entire context of lines 47 - 60, reads as follows:

Referring back to FIG. 2A, SMD 150 can further include an input interface circuit 236 that couples via signal line 237 to an input element 238. Input element 238 can be a switch, a push button, a key, or the like. **When input element 238 is activated (i.e., by pushing on a print control key), SMD 150 of metering device 110a performs the Indicium transaction. SMD 150 generates an indicium having a predetermined value and directs printer 152 to dispense the indicium. SMD 150 updates its revenue registers when the indicium is generated. SMD 150 generates the indicium when requested and as long as the funds in the revenue registers are sufficient to cover the indicium value. Otherwise, the metering device can indicate a failed Indicium transaction via, for example, a blinking light emitting diode (LED).** [emphasis added by Appellant]

As such, the input element 238 of **LEON**, cited by the Examiner as the motivation to combine **LEON** with an external "authorization device" as claimed by Applicants, **does not relate to providing an authorization, based upon which the mailing machine is initialized, as required by Applicants' claims, but, rather, is merely a push button or key used for printing the indicium (i.e., the postage slip).** Rather, **LEON** addresses initialization of the device in **LEON** in col. 13, lines 22 - 60, as follows:

Initialization transaction: An Initialization transaction prepares the SMD for operation. The following is a specific implementation of the Initialization transaction, and other implementations are available.

FIG. 5B shows a flow diagram of an embodiment of the Initialization transaction. At a step 520, the SMD is prepared for the Initialization transaction. This preparation can comprise installing a FIT flag located on the SMD. The Crypto-Officer then, via a host PC, sends the SMD an initialization request message that includes the Provider X.509 certificate and the device ID number, at a step 522. This request message is signed using the provider's private key. The SMD receives and validates the request message, at a step 524.

The SMD accepts a request to perform an Initialization transaction if it is in an Uninitialized or Initialized state. This determination is performed at a step 526. If the SMD receives a request to perform an Initialization transaction and the FIT flag is not installed or if the SMD is not in the Uninitialized or Initialized state, the SMD ignores the request and the transaction terminates. The validation of the request message includes verification of the signature in the request message using the provider's public key from the Provider X.509 certificate, at a step 528. If the signature is invalid, the SMD sends an error message, at a step 530, and the transaction terminates.

If the signature is valid, the SMD saves the Provider X.509 certificate provided in the request message, at a step 532. The DSA (digital signature algorithm) parameters p , q , and r are then loaded into the SMD, at a step 534. The SMD uses these parameters to generate a pair of public and provide keys, at a step 536. The SMD retains the private key in secrecy and exports the public key. The SMD sends the host PC a signed message that includes the SMD's public key, at a step 538. This message is signed using the SMD's private key and can be verified by the host PC using the SMD's public key that is included in the message. The SMD then transitions to the Initialized state, at a step 540. **Before an initialized SMD leaves the factory, the Crypto-Officer removes the FIT flag and seals the tamper-evident enclosure, at a step 542.** [emphasis added by Appellant]

LEON teaches that before an initialized SMD (one containing the key) leaves the factory, **the Crypto-Officer removes the FIT flag and seals the tamper-evident enclosure**, at a step 542. In Leon, **nothing further can ever be "removably attached" to provide authorization for initialization**. As such, **LEON** fails to teach or suggest, or provide any motivation at all, **for a removable authorization device, the point of which is to prevent an initialization of the mailing machine without authorization**, as claimed by Appellant. The input element 238 of **LEON** has **nothing to do with authorizing initialization (i.e., as defined in the instant specification) of the postal machine of LEON**, as is required of the removable authorization device of Appellant's claims, but merely is used to print the frank, and thus, **cannot be said to provide the motivation alleged by the Examiner**.

Rather, the **LEON** reference describes a "**funding transaction**" which is performed when the indicium register is zero (i.e., no more funds are available for printing an indicium) which is allegedly closer to Appellant's claimed **initialization**. For example, col. 37, lines 32 - 39 of **LEON** discloses a "funding transaction" described as follows:

"In the stand-alone mode, the metering device is capable of printing as many indicia (i.e., of a predetermined value) as allowed by the funds stored in the SMD. **Once the SMD has expended the funds stored in its revenue registers, it can be loaded with**

additional funds by performing another Funding transaction. The metering device can then be re-coupled to the host PC for this Funding transaction, and disconnected again after the Funding transaction.
[emphasis added by Appellant]

Although described in connection with the embodiment that uses the input element 238, cited by the Examiner, **the input element 238 of LEON is not used in the funding transaction.** Rather, the teaching in col. 37, lines 48 - 50 of **LEON**, read in its entire context, merely provides a motivation for providing a push button or key **to print franks (i.e. indicium), which must only necessarily occur after a funding transaction (arguendo, "initialization") has been completed.**

As such, Appellant respectfully traverses the allegations made in the **Examiner's Answer** that there is motivation in **LEON** for Appellant's particularly claimed authorization device.

Further, on pages 6 - 7 of the **Examiner's Answer**, it is alleged, in part, that:

The Appellant further argues that Leon is initializing a security module, not the mailing machine as recited in the instant claims. The Examiner submits that the mailing machine has a security module/section that must be initialized before it can function. The kind or type of equipment/machine that is initialized does not render an invention original, unique or non-obvious. **The method incorporated to initialize a piece of equipment/machine is what is being presented and addressed in the prior Office Action.** [emphasis added by Appellant]

However, as stated above, Appellant maintains that the **LEON** reference does not teach or suggest an **authorization device, that is required for initializing a device**. The printing of an "indicium" (i.e., frank or mailing slip) of **LEON** does not entail "**initialization**", as claimed by Appellant.

Further, on page 7 of the **Examiner's Answer**, it is stated in part, that:

In reference to the Appellant's statement that, " ... there is no clear and particular teaching or suggestion in Leon to incorporate the features of Vu . . ." the Examiner submits that Leon's [sic] discloses the use of an input element that includes a switch, a key or the like. Col. 37, liners 34-48 [sic]. Vu teaches about a type of key that could be used.

As discussed above, Appellant respectfully disagrees that **LEON** provides the alleged motivation. The input element of **LEON** is **unrelated to initialization of the mailing machine** (i.e., or any other device), **as required by Appellant's claims 1 and 18**, but is merely used to print out the "**indicium**" (i.e., printing franks *after* a funding transaction/"initialization" has been completed). As such, Appellant believes that **LEON** truly fails to provide the alleged motivation for combining **LEON** with **VU**, to disclose Appellant's invention of claims 1 and 18.

Appellant further realleges and incorporates herein the arguments made in its Appeal Briefs dated November 4, 2005 and

March 13, 2006, as those arguments relate to claims 1, 18, 4,
24 and 26.

Based on the above given arguments the honorable Board is
therefore respectfully urged to reverse the final rejection of
the Primary Examiner.

Please charge any additional fees that might be due with
respect to Sections 1.16 and 1.17 to the Deposit Account of
Lerner Greenberg Stemer LLP, No. 12-1099.

Respectfully submitted,

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